

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Chan-Soo HWANG, et al. Examiner: not yet known

Serial No.: not yet assigned Art Unit: not yet known

Filed: herewith Date: October 23, 2003

For: **TRANSMISSION/RECEPTION APPARATUS FOR A WIRELESS  
COMMUNICATION SYSTEM WITH THREE TRANSMISSION  
ANTENNAS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to Applicant(s) duty of disclosure, the information listed on the attached form PTO-1449 is brought to the attention of the Examiner. A copy of the listed items is enclosed.

The citation of the listed items is not a representation that they constitute a complete or exhaustive listing of the relevant art or that the references are prior art. The items listed are submitted in good faith, but are not intended to a substitute for the Examiner's search. It is hoped, however, that in addition to apprising the Examiner of these particular items, they will assist in identifying fields of search and in making as full and complete a search as possible.

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**CERTIFICATION UNDER 37 C.F.R. § 1.10**

I hereby certify that this correspondence is being deposited with the United States Postal Service on this date October 23, 2003 in an envelope as "Express Mail Post Office to Addressee" Mail Label Number EL 995743853 US addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
John F. Gallagher III

ATTORNEY DOCKET 678-1217 (P10800)

The filing of this information disclosure statement is not an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

- This information disclosure statement is being filed within three (3) months of the filing date of this application.
- This information disclosure statement is being filed within three (3) months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application.
- To the best of Applicant(s) knowledge, this information disclosure statement is being filed before the date of mailing of a first Office Action on the merits in connection with this case.
- Enclosed herewith is a certificate under 37 C.F.R. § 1.97(e)(1).
- Enclosed herewith is a petition under 37 C.F.R. § 1.97(d)(ii).
- Enclosed by check is the petition fee of \$130.00. 37 C.F.R. § 1.17(i)(1))
- Please charge the **\$130.00** petition fee to Deposit Account No. 04-1121.
- Enclosed by check is the **\$180.00** fee required by 37 C.F.R. § 1.17(p).
- Please charge the **\$180.00** fee required by 37 C.F.R. § 1.17(p) to Deposit Account No. 04-1121.

**ATTORNEY DOCKET 678-1217 (P10800)**

[X] Please charge any deficiency as well as any other fee(s) which may become due under 37 C.F.R. § 1.16 and/or 1.17 at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account 04-1121. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 04-1121 therefor.  
**TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.**

Early and favorable consideration of the case is respectfully requested.

Respectfully submitted,



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Paul J. Farrell  
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Attorney for Applicant(s)

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Form PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 678-1217 (P10800)	SERIAL NO. not yet assigned		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary)		APPLICANTS Chan-Soo HWANG, et al.					
		FILING DATE herewith	GROUP ART UNIT not yet known				
U.S. PATENT DOCUMENTS							
EXAMINE R INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
		1.	V. Tarokh, H. Jafarkhani, and A. R. Calderbank, "Space-Time Block Codes from Orthogonal Designs", IEEE Trans. Inform. Theory, vol. 45, pp. 1456-1467, July 1999				
		2.	Siavash M. Alamouti "A Simple Transmitter Diversity Scheme For Wireless Communications," IEEE Journal on Selected Area in Communications, Vol. 16, pp. 1451-1458, Oct. 1998.				
EXAMINER				DATE CONSIDERED			
<p>* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609.</p> <p>Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>							